

### Best Paper Awards

ID	TITLE & AUTHORS
17	A Fault Diagnosis Scheme Based on The Normalized Indexes of The Images Eccentricity for A Multilevel Converter of A Switched Reluctance Motor Drive Tito Amaral, V. Fernao Pires, Daniel Foito, Armando Cordeiro, José-inácio Rocha, Miguel Chaves, A. J. Pires, J. F. Martins
46	Virtual Synchronous Generator: An Application to Microgrid Stability Guido Ala, Antonino Oscar Di Tommaso, Rosario Miceli, Claudio Nevoloso, Gioacchino Scaglione, Giuseppe Schettino, Fabio Viola
48	Low-power Renewable Possibilities for Geothermal Iot Monitoring Systems Radek Byrtus, Radim Hercik, Jakub Dohnal, Birgitta Martinkauppi, Tuomas Rauta, Jiri Koziorek
66	A Proposal of Sinusoidal Voltage Source Fed Optimal Current Control for Im with Active Lc Filter by Irm-ilq Control Masahiro Watabe, Ayumu Okubo, Hiroshi Takami, Fuminori Ishibashi, Masashi Nakamura, Toshiaki Oka
73	Hybrid J-type Darrieus and Savonius Vertical Axis Wind Turbine Capable of Harvesting Roadside Wind Energy James Angelo C. Lipiao, Nicca Mae M. Divina, Ronald Vincent Santiago, Carlos Hortinela IV
78	Design and Characterisation of An Alkaline Electrolyser Torben Mus, Bram Vanhoutte, Sam Schotte, Steven Fevery, Steven K. Latré, Michael Kleemann, Frank Buyschaert
196	Digital Peak Current Mode Control DC-DC Converter for Renewable Energy System Yudai Furukawa, Yuichiro Shibata, Tadashi Suetsugu, Ilhami Colak, Fujio Kurokawa
219	Direct-drive Wind Generator Concept with Non-rare-earth Pm Flux Intensifying Stator and Reluctance Outer Rotor Ali Mohammadi, Oluwaseun A. Badewa, Yaser Chulaee, Dan M. Ionel, Somasundaram Essakiappan, Madhav Manjrekar

### Outstanding Paper Awards

ID	TITLE & AUTHORS
82	Resonance Phenomenon During Rectification in A System with A Permanent Magnet Generator Yuto Iwasaki, Kazuki Ikeda, Toshiya Nanahara, Tadashi Hosoe, Yukita Kazuto, Yasuyuki Goto
132	Hybrid Renewable Energy Systems with Hydrogen and Battery Storage Options for Stand-alone Residential Building Application in Canada Wahiba Yaici, Andres Annuk, Evgueniy Entchev, Michela Longo
135	Interoperability Control/monitoring of Multi-paralleled Inverters by Iec61850 Protocol Alperen Mustafa Colak, Yoshihiro Tawada, Yasuaki Mitsugi, Ruben Inzunza, Tatsuaki Amboh
139	Sensor Placement Strategy for Locating Photovoltaic Array Failures Hicham Oufettoul, Saad MOTAHHIR, Ghassane Aniba, Ibtihal Ait Abdelmoula
173	Parameter Selection of An Llc Resonant Converter for PV Application Saban Ozdemir, Necmi Altin, Ahmad El Shafei, Adel Nasiri
175	Short-term Forecasting of Photovoltaic Power in An Isolated Area of Ecuador Using Deep Learning Techniques Richard Guanoluisa, Alexander Ibarra, Diego Arcos-aviles, Wilmar Martinez, Emilia Motoasca, Francesc Guinjoan
183	Fuzzy-mppt Controller Based Solar Shunt Active Power Filter Mustapha SARRA, Abdelhakim Belkaid, Ilhami Colak, Ghania Boudechiche, Korhan Kayisli
188	Hybrid Active Power Filter Using A Filter-less Extraction Technique Abdallah El Ghaly, Mohamad Tarnini, Nazih Moubayed, Khaled Chahine
209	Improvement of Modelling for An Optimal Facility Design Using Renewable Energy in A Clinic Yuji Mizuno, Masaharu Tanaka, Yoshito Tanaka, Fujio Kurokawa, Nobumasa Matsui

### Encouragement Paper Awards

ID	TITLE & AUTHORS
195	Knn Classifier Applications in Wind and Solar Energy Systems Mehmet Yesilbudak, Ahmet Ozcan
199	The Effect of Temperature Changes on Semiconductor Material Efficiency Under Load Fatih Tuztasi, Macit Aydin
210	A Topsis Model to Support Smart Appliance Decision Energy Management in Smart Grid Abdulrahman Ibrahim Alkassam, Mishaal Alkaabi
218	Multi-physics and Artificial Intelligence Models for Digital Twin Implementations of Residential Electric Loads Steven Poore, Rosemary E. Alden, Huangjie Gong, Dan M. Ionel